

NON-ERASABLE MAGNETIC IDENTIFICATION MEDIA

ABSTRACT

A magnetic storage medium and method of manufacturing the same comprises a substrate, a magnetic material adjacent to the substrate, and regions of variable magnetic permeability in the magnetic material, wherein the magnetic material may comprise a multilayered structure. Moreover, methods are described for making two kinds of media, read only and read/write media. Additionally, the magnetic material comprises any of permalloy, metglass, copper, nickel, iron, cobalt, boron, silicon and any combination thereof, and the magnetic material is approximately 10 to 1,000 nm thick. The regions of variable magnetic permeability comprise regions having a lower permeability than other regions, wherein the regions having a lower permeability than other regions is crystalline, and the regions having a higher permeability can be either crystalline or amorphous, and wherein the areas of lower and higher permeability are dimensioned and configured to be approximately 1 to 20 microns in size.